

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

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**PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte DONALD AVES

Appeal No. 2003-2112
Application No. 09/320,303¹

HEARD: JANUARY 6, 2004

Before BARRETT, BARRY and SAADAT, Administrative Patent Judges.
SAADAT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the Examiner's final rejection of claims 1-25, which are all of the claims pending in this application.

We reverse.

BACKGROUND

Appellant's invention relates to a method for optimizing segmented transmission lines to define a model of the system and to determine the characteristics of the segments for reducing mismatch and the voltage standing wave ratio. First, a model of the transmission line, using parameters describing the

¹ Application for patent filed May 26, 1999.

performance of each component and the length dependency of the parameters, is built (specification, page 13). Each line length is then adjusted according to predefined criteria until a minimum overall reflection coefficient is obtained (id.).

Representative independent claims 1 and 10 are reproduced as follows:

1. A computer model for describing a performance of a segmented transmission line having a plurality of segments, each segment having a transfer function, comprising:

(a) means for storing at least one characteristic value the transfer function of a respective segment of the segmented transmission line;

(b) means for storing information relating to at least one algorithm, said algorithm being for determining the effect of a respective characteristic value and sequence of transmission line segments on a performance of the overall segmented transmission line; and

(c) means for adjusting a characteristic value,

whereby a set of characteristic values is defined for respective transmission line segments, having an optimized performance in view of the at least one algorithm.

10. A method for optimizing the segment characteristics of a segmented transmission line, comprising the steps of modeling the electrical performance of the segmented transmission line, evaluating the model for electrical performance, and selecting a set of segment characteristics, based on the evaluation, which meets a set of predefined optimization criteria.

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The examiner relies on the following prior art references:

Fleming-Dahl	5,218,326	Jun. 8, 1993
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Huss, S. (Huss), "A mathematical and lumped-element model for multiple cascaded lossy transmission lines with arbitrary impedances and discontinuities," IEEE ISCAS '95, May 3, 1995, pp. 1844-1847.

Claims 1-25 stand rejected under 35 U.S.C. § 112, first paragraph for lack of enabling disclosure.

Claims 1-25 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to convey to one skilled in the relevant art that Appellant, at the time the application was filed, had possession of the claimed invention.

Claims 8-9, 17-20 and 22-25 stand rejected under the second paragraph of 35 U.S.C. § 112 as being indefinite.

Claims 1-25 stand rejected under the second paragraph of 35 U.S.C. § 112 as being incomplete for omitting essential steps or elements.

Claims 10, 11 and 13-21 stand rejected under 35 U.S.C.
§ 102(b) as being anticipated by Fleming-Dahl.

Claims 1-9, 12 and 22-25 stand rejected under 35 U.S.C.
§ 103(a) as being unpatentable over Fleming-Dahl in view of Huss.

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We make reference to the answer (Paper No. 13, mailed January 29, 2003) for the Examiner's reasoning in support of the rejections, and to the brief (Paper No. 12, filed December 30, 2002) and the reply brief (Paper No. 14, filed April 2, 2003) for Appellant's arguments thereagainst.

OPINION

With regard to the rejection of the claims under the first paragraph of 35 U.S.C. § 112, the Examiner points to the same elements as lacking substantive detailed description in the specification for both the lack of enabling disclosure and written description. In particular, the Examiner points out that the specific characteristic values, transfer functions, algorithms, distributions and means for optimization are missing in the specification (answer, page 5).

Appellant argues that the level of skill in the art of transmission line analysis and optimization includes a knowledge of what these elements are (brief, page 7 & reply brief, page 6). In order to show the state of "transmission line" technology at the time of filing of the application, Appellant further relies on the prior art discussion in the specification, particularly the U.S. Patent No. 5,436,846, to indicate that the person of ordinary skill is familiar with the terms and phrases used in the

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art and would know where and how to obtain such systems if required (id.).

The Examiner responds to Appellant's arguments by questioning the sufficiency of the disclosure for enabling one of ordinary skill in the art to provide transmission line optimization based on the elements recited in the claims (answer, pages 8-15). The examiner specifically refers to Appellant's reliance on the state of the prior art and points out that the specification, and not the prior art, needs to be enabling with respect to the claimed features (answer, page 11).

We note that the first paragraph of 35 U.S.C. § 112 provides:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

As a general rule, the enablement requirement is satisfied when the specification, when filed, enables one skilled in the particular art to use the invention without undue experimentation. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Additionally, to be enabling, the specification must teach those of skill in the art "how to make

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and how to use the invention as broadly as it is claimed." In re Vaeck, 947 F.2d 488, 496, 20 USPQ2d 1438, 1445 (Fed. Cir. 1991).

We find that Appellant's specification contains various references to the discontinuities in a transmission line and how the length of the transmission line segments may be distributed in order to reduce the effects of impedance mismatches and reflections (specification, pages 1-6). The specification further indicates that instead of the prior art approach of relying only on the characteristics of individual line segments, an optimized model of the entire system be used to define the segment lengths (page 7, lines 2-7). Additionally, the transfer function is described as the specific simulation or network analysis for obtaining the response of each segment and its corresponding parameters related to elbows, filters or antennas that are to be added to the system (page 7, line 20 to page 8, line 10). Therefore, to the extent that is claimed, the model of a transmission line as defined by its parameters and characteristic values using an algorithm do not require specific description beyond what is in the specification and identified as known by one skilled in the art. Accordingly, we cannot sustain the rejection of claims 1-25 under 35 U.S.C. § 112, first paragraph for lack of an enabling disclosure.

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Turning now to the lack of written description rejection of claims 1-25 under 35 U.S.C. § 112, first paragraph, Appellant asserts that even without relying on the computer code, the present invention "builds upon prior art understanding of transmission lines by providing method of optimization and its computer model" (brief, page 10). Appellant further argues that by presenting actual data obtained through the use of the claimed method in the specification, Appellant has demonstrated actual reduction to practice (reply brief, page 7). Additionally, Appellant points out that it is the level of the knowledge of one of ordinary skill in the art that determines whether Appellant had possession, not personal opinion of the Examiner (reply brief, page 8).

In response, the Examiner points out that incorporation by reference of the particular claimed features does not overcome the lack of written description since the disclosure does not correspond the disclosed features to those recited in the claims (answer, page 16). The Examiner further relies on various court decisions that generally relates to the requirements of written description (answer, pages 15-18), but fails to specifically outline a reasonable basis to question lack of written description.

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As established with respect to the lack of enablement discussion and the text of the first paragraph of 35 U.S.C. § 112, supra, the written description requirement serves "to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him; how the specification accomplishes this is not material." In re Wertheim, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). In order to meet the written description requirement, Appellant does not have to utilize any particular form of disclosure to describe the subject matter claimed, but "the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989). Put another way, "the application as originally filed must reasonably convey to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language. See Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1116-17 (Fed. Cir. 1991) and In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983). Additionally, "[p]recisely how close the original description must come to comply with the description

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requirement of section 112 must be determined on a case-by-case basis." Eiselstein v. Frank, 52 F.3d 1035, 1039, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995) (quoting Vas-Cath, 935 F.2d at 1561, 19 USPQ2d at 1116).

Thus, the test for determining compliance with the written description requirement is whether the disclosure conveys with reasonable clarity to those skilled in the art that describing or modeling a performance of a segmented transmission line is adequately described. Here, we find that Appellant's specification contains various references to the conventional methods of modeling segments of a transmission line to reduce impedance mismatches and "reflections" (specification, pages 1-6). The disclosure further describes a method for optimizing a segmented transmission line based on a model of the system and the optimization parameters, which are used to generate segment characteristic values for optimized performance (specification, pages 7 & 8).

In view of the analysis above and to the extent that is claimed, we find that the description of these segment characteristics and the modeling of the segmented portions' performances provide the necessary correspondence between the claimed modeling of the segmented transmission line and the

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optimized results based on the actual data presented and analyzed. Accordingly, we will not sustain the lack of written description rejection of claims 1-25 under the first paragraph of 35 U.S.C. § 112.

With respect to the rejection of claims under the second paragraph of 35 U.S.C. § 112, Appellant argues that the claimed invention is directed to methods of optimization without reciting the implementation details of the optimization algorithm (brief, page 12). Appellants further points out that although some of the claims recite using a "transfer function," the invention is about providing optimization of a system which in effect, describes the transformation of a signal between input and the output (reply brief, page 8). Additionally, Appellant indicates that in spite of the breadth in the language of the claims, no critical details of the optimization have been left out that are necessarily needed for tuning a set of parameters (reply brief, page 9).

In response, the Examiner indicates that because the term "transfer function" may have different meanings, the claim scope is indefinite (answer, page 18). The Examiner further points out that Appellant must claim the details necessary for carrying out

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the optimization which is essential in a method for optimizing
(answer, pages 18-22).

Analysis of 35 U.S.C. § 112, second paragraph, should begin with the determination of whether claims set out and circumscribe the particular area with a reasonable degree of precision and particularity; it is here where definiteness of the language must be analyzed, not in a vacuum, but always in light of teachings of the disclosure as it would be interpreted by one possessing ordinary skill in the art. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977), citing In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (1971). "The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope." In re Warmerdam, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). Furthermore, our reviewing court points out that a claim which is of such breadth that it reads on subject matter disclosed in the prior art is rejected under 35 U.S.C. § 102 rather than under 35 U.S.C. § 112, second paragraph. See In re Hyatt, 708 F.2d 712, 715, 218 USPQ 195, 197 (Fed. Cir. 1983) citing In re Borkowski, 422 F.2d 904, 909, 164 USPQ 642, 645-46 (CCPA 1970).

Upon a careful review of the claim language and the specification, we find that the claimed "transfer function" clearly refers to defined algorithms that correspond to the system behavior of a segmented transmission line. It is clear from the specification as a whole and pages 7 and 8 specifically, that the optimization of the transmission line parameters, according to a defined set of transformations, result in a system of equations or transfer functions. We further find that the disclosure provides various examples of determining transmission line lengths (Table 1 and page 14) based on the disclosed optimization model.

In view of the above and in light of the specification as a whole, we find that the details of the transfer function and the optimization model are sufficiently defined and would reasonably apprise those skilled in the art of the scope of these limitations. Accordingly, we will not sustain the rejection of claims 1-25 under the second paragraph of 35 U.S.C. § 112.

Turning now to the 35 U.S.C. § 102 rejection of claims 10, 11 and 13-21 as anticipated by Fleming-Dahl, Appellant points out that the prior art defines a set of coaxial cable lengths in no particular order whereas the claims are directed to modeling the performance of the segmented transmission line (brief, page 12;

reply brief, page 9). Appellant further asserts that Fleming-Dahl, in order to select the cable lengths, neither models the performance of the segmented transmission line nor evaluates the model (id.). Appellant further argues that the prior art does not define the order of the segments and therefore cannot use the aspect of order sensitivity in optimizing the system of the segment lengths (brief, page 12). Additionally, Appellant argues that considering order matters since "each discontinuity at a segment boundary results in a power reflection; the successive power reflections interact, and can create both constructive and destructive interference over a range of multiple segments" (oral hearing and brief, paragraph bridging pages 12 & 13).

In response to Appellant's arguments, the Examiner refers to numerous portions of the prior art and equates the selection of cable lengths based on avoiding the worst case voltage interactions in Fleming-Dahl with the claimed optimization model (answer, page 25). The Examiner further provides a lengthy discussion of distributed transmission line effects (answer, pages 25 & 26), which is actually a misplaced argument as Appellant's characterization of "lumping parameters" with respect to transmission lines, indeed, relates to the other reference applied in the rejection under section 103.

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A rejection for anticipation under section 102 requires that the four corners of a single prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation. See Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999); In re Paulsen, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

After reviewing Fleming-Dahl, we agree with Appellant's assertion that the claimed steps of modeling the performance of the segmented transmission line and evaluating the model are absent in the reference. Fleming-Dahl relates to a method of defining component lengths in a radio frequency or microwave system (abstract). The determination of the length of each segment and ensuring that the frequencies of worst case voltage addition for any one cable minimizes the total reflection for all frequencies (col. 2, lines 41-54, col. 3, lines 10-20, col. 4, lines 14-32), as relied on by the Examiner, considers power loss and reflection of only each segment instead of the overall system

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and evaluating its model. We also agree with Appellant's assessment of these passages depicting this approach as an inaccurate representation of component behavior (col. 1, lines 43-68) which indicate nothing about modeling the system (reply brief, page 10).

Therefore, what the Examiner characterizes in Fleming-Dahl as the impedance modeling approach, is actually a method of selecting the lengths of the segments without considering their respective order in the overall model for their electrical performance. Thus, Fleming-Dahl does not anticipate claim 10 and the 35 U.S.C. § 102 rejection of claims 10, 11 and 13-21 over Fleming-Dahl cannot be sustained.

With respect to the 35 U.S.C. § 103 rejection of claims 1-9, 12 and 22-25 over Fleming-Dahl in view of Huss, Appellant argues that Huss discloses a model for obtaining a simplified expression to represent transmission lines instead of a model used for optimization (brief, page 13; reply brief, page 10). Appellant further argues that the analysis of Huss is not segment-order dependent and merely suggests a simplified analysis of the transmission line segment as a lumped-element model wherein its segments are sized according to Fleming-Dahl without considering

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the order of elements and the sequence of the transmission line segments (brief, page 14; reply brief, page 11).

The Examiner responds to Appellant's arguments by pointing out that Appellant has not clearly defined the "transfer function" and Huss, at least, clearly teaches a transfer function for modifying Fleming-Dahl (answer, page 31). Additionally, the Examiner indicates that without disclosing the details of a model or the transfer function, the claimed subject matter is either inherent in the design (answer, page 30) or taught by Huss (answer, page 31).

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). The conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

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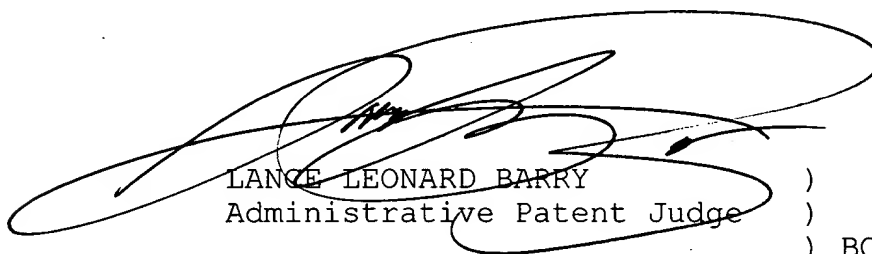
We note that claim 1 requires that the algorithm for optimizing the line performance is for "determining the effect of a respective characteristic value and sequence of transmission line segments on a performance of the overall segmented transmission line." (Emphasis added]. The Examiner, in asserting that the lumped-element model of Huss provides the transfer function for the modeling of the performance of a segmented transmission line, has not provided additional evidence to overcome the deficiencies of Fleming-Dahl as discussed above and fails to establish a prima facie case of obviousness. In that regard, neither reference indicates anything related to the order or sequence of the line segments and their effect on the performance of the overall segmented line. Accordingly, we do not sustain the 35 U.S.C. § 103 rejection of claim 1-9, 12 and 22-25 over Fleming-Dahl and Huss.

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CONCLUSION

In view of the forgoing, the decision of the Examiner rejecting claims 1-25 under 35 U.S.C. § 112, rejecting claims 10, 11 and 13-21 under 35 U.S.C. § 102 and rejecting claims 1-9, 12 and 22-25 under 35 U.S.C. § 103 is reversed.

REVERSED



LANCE LEONARD BARRY
Administrative Patent Judge



MAHSHID D. SAADAT
Administrative Patent Judge

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BARRETT, Administrative Patent Judge, concurring.

I agree with the majority's treatment of the rejections, but write separately to express my opinion that claims 10-15, 17, 18, and 21 are directed an "abstract idea" which should be rejected as nonstatutory subject matter under 35 U.S.C. § 101.

The Constitution authorizes Congress "To promote the Progress of . . . useful Arts, by securing for limited Times . . . Inventors the exclusive Right to their . . . Discoveries." U.S. Const., art. I, § 8, cl. 8. "This qualified authority . . . is limited to the promotion of advances in the 'useful arts.'" Graham v. John Deere Co., 383 U.S. 1, 5, 148 USPQ 459, 462 (1966). "[T]he present day equivalent of the term 'useful arts' employed by the Founding Fathers is 'technological arts.'" In re Bergy, 596 F.2d 952, 959, 201 USPQ 352, 359 (CCPA 1979), aff'd sub nom. Diamond v. Chakrabarty, 447 U.S. 303, 206 USPQ 193 (1980). The "useful arts" have been defined by Congress as a "process, machine, manufacture, or composition of matter," 35 U.S.C. § 101. "These terms may not be read in a strict literal sense entirely divorced from the context of the patent law." In re Alappat, 33 F.3d 1526, 1553, 31 USPQ2d 1545, 1565 (Fed. Cir. 1994) (en banc) (C.J. Archer, concurring in part and dissenting in part), citing, inter alia, In re Schrader,

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22 F.3d 290, 295-96 & n.11, 30 UPSQ2d 1455, 1459-60 & n.11 (Fed. Cir. 1994). "When Congress approved the addition of the term 'process' to the categories of patentable subject matter in 1952, it incorporated the definition of 'process' that had evolved in the courts" (footnotes omitted), Schrader, 22 F.3d at 295, 30 UPSQ2d at 1459, which included this definition from Cochrane v. Deener, 94 U.S. 780, 787-788 (1888): "A process is . . . an act, or series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing" (emphasis added). The "subject matter" transformed need not be a physical (tangible) object or article or substance, but could be physical, yet intangible, such as electricity or electromagnetic waves. See In re Ernst, 71 F.2d 169, 170, 22 USPQ 28, 29-30 (CCPA 1934); In re Prater, 415 F.2d 1378, 1388, 159 USPQ 583, 592 (CCPA 1968) (in the Telephone Cases, 126 U.S. 1 (1887), Bell's fifth claim to a process of transmitting sounds telegraphically by changing the intensity of a continuous electrical current, i.e., a process acting on energy rather than physical matter, was held valid and infringed); Schrader, 22 F.3d at 295, 30 UPSQ2d at 1459-60 (noting imperfect statements requiring object or article in 1 William C. Robinson, The Law of Patents for Useful Inventions § 159 (1890) and Gottschalk v. Benson, 409 U.S. 63, 175 USPQ 673

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(1972), and stating that "it is apparent that changes to intangible subject matter representative of or constituting physical activity or objects are included in this definition").

The two recent Federal Circuit decisions in State St. Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998) and AT&T v. Excel Communications, Inc., 172 F.3d 1352, 50 USPQ2d 1447 (Fed. Cir. 1999), state that the transformation of data by a machine constitutes statutory subject matter if there is a "practical application, i.e., 'a useful, concrete and tangible result.'" State Street, 149 F.3d at 1372, 47 USPQ2d at 1600-01. State Street and AT&T required transformation of data by a machine before it applied the "useful, concrete and tangible" test. As discussed in State Street, 149 F.3d at 1373, 47 USPQ2d at 1601:

In Alappat, we held that data, transformed by a machine through a series of mathematical calculations to produce a smooth waveform display on a rasterizer monitor, constituted a practical application of an abstract idea (a mathematical algorithm, formula, or calculation), because it produced "a useful, concrete and tangible result" – the smooth waveform.

Similarly, in Arrhythmia Research Technology Inc. v. Corazonix Corp., 958 F.2d 1053, 22 USPQ2d 1033 (Fed. Cir. 1992), we held that the transformation of electrocardiograph signals from a patient's heartbeat by a machine through a series of mathematical calculations constituted a practical application of an abstract idea (a mathematical algorithm, formula, or calculation), because it corresponded to a useful, concrete or tangible thing – the condition of a patient's heart.

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Today, we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces "a useful, concrete and tangible result" – a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades. [Emphasis added.]

The Federal Circuit stated in AT&T, 172 F.3d at 1358, 50 USPQ2d at 1452:

As previously explained, AT&T's claimed process employs subscribers' and call recipients' PICs as data, applies Boolean algebra to those data to determine the value of the PIC indicator, and applies that value through switching and recording mechanisms to create a signal useful for billing purposes. . . .

. . . It is clear from the written description of the '184 patent that AT&T is only claiming a process that uses the Boolean principle in order to determine the value of the PIC indicator. The PIC indicator represents information about the call recipients's PIC, a useful, non-abstract result that facilitates differential billing of long-distance calls made by an IXC's subscriber. Because the claimed process applies the Boolean principle to produce a useful, concrete, tangible result without pre-empting other uses of the mathematical principle, on its face the claimed process comfortably falls within the scope of § 101. [Emphasis added.]

State Street and AT&T do not hold that a "useful, concrete and tangible result" alone, without a machine, is sufficient for statutory subject matter. I interpret the Federal Circuit test to be based on a summary of existing principles, rather than a newly created test. That is, the terms "practical application"

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and "useful" are interpreted to refer to the Constitutional "useful arts" ("technological arts") as defined in the four categories of § 101 and the case law requiring a practical application, and the terms "concrete and tangible" are the opposite of a disembodied "abstract idea."

Claim 10 recites: "A method for optimizing the segment characteristics of a segmented transmission line, comprising the steps of modeling the electrical performance of the segmented transmission line, evaluating the model for electrical performance, and selecting a set of segment characteristics, based on the evaluation, which meets a set of predefined optimization criteria." The steps of claim 10 are not recited to be performed by a machine, such as a programmed computer, and do not transform physical subject matter to a different state or thing using physical steps as required by a "process." The "model" and the steps of claim 10, as claimed, are theoretical operations on data, which are not embodied in any physical structure or physical transformation steps. Thus, I conclude that the subject matter of claim 10 is directed to an "abstract idea." Claims 11-15, 17, 18, and 21 likewise do not require any physical transformation of subject matter and are "abstract."

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Although it is true that claim 10 also reads on performing the steps by a machine, such as a programmed computer, a machine is not required. Where a claim is broad enough to read on both statutory subject matter (machine implementation or physical transformation of physical subject matter) as well as nonstatutory subject matter (an abstract idea), the best position is to hold the claimed subject matter to be nonstatutory because, while a claim is pending and can be amended, a claim's meaning should be delimited by express terms rather than by claim interpretation. Cf. In re Lintner, 458 F.2d 1013, 1015, 173 USPQ 560, 562 (CCPA 1972) ("Claims which are broad enough to read on obvious subject matter are unpatentable even though they also read on nonobvious subject matter.").

Lee E. Barrett

LEE E. BARRETT

Administrative Patent Judge

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Steven M. Hoffberg, Esq.
Milde, Hoffberg & Macklin, LLP
10 Bank Street
Suite 460
White Plains, NY 10606